

C L A I M S

1. Drill bit for drilling a borehole in an object, the drill bit having a central longitudinal axis and comprising a bit body provided with a central shank for connecting the drill bit to a drilling system, the drill  
5 bit further comprising at least one cutting arm, each cutting arm being provided with a set of cutters for cutting the object and being coupled to the bit body via pivot means allowing the cutting arm to pivot between a radially retracted position and a radially expanded  
10 position, the drill bit being provided with support means for supporting the cutting arm in the radially expanded position thereof, wherein the support means is arranged to transmit at least a portion of the rotational torque generated during drilling, from the cutting arm to the  
15 bit body so as to reduce or prevent transmission of said rotational torque via the pivot means.
2. The drill bit of claim 1, wherein the support means is further arranged to transmit an axial compressive load from the cutting arm to the bit body.
- 20 3. The drill bit of claim 1 or 2, wherein the support means is further arranged to support a radial compressive load from the cutting arm to the bit body.
4. The drill bit of any one of the previous claims, wherein the support means is arranged to transmit a  
25 majority of the rotational torque, preferably essentially the full rotational torque, from the cutting arm to the bit body.
5. The drill bit of any one of the previous claims, wherein the cutting arm is additionally pivotable to an

intermediate position, in which intermediate position a second set of cutters is arranged in a second cutting position with respect to the object for drilling a borehole with a smaller gauge than in the expanded position.

5

6. The drill bit of any one of the previous claims, further comprising a pilot section provided with pilot cutters arranged for pre-cutting a pilot borehole ahead of the cutting arm.

10

7. The drill bit of claim 6, wherein the pilot section is axially movable with respect to the shank whereby the cutting arm is coupled to the pilot section for controlling the pivoting of the cutting arm.

15

8. The drill bit of claim 7, wherein the pilot section is coupled to a hydraulic system for controlling said axial movability.

9. The drill bit of any one of claims 1-8, wherein the drill bit is a drill bit for drilling a borehole in an earth formation.

20

10. The drill bit substantially as described hereinbefore with reference to the accompanying drawings.